

AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of dynamically modifying resources within a compute environment comprising a plurality of compute nodes under common administrative control, the method comprising:

receiving a request for a reservation, at a current time, for resources in the compute environment at a future time;

monitoring events after receiving the request for the reservation for resources; and

based on the monitored events, dynamically modifying ~~at least one of the request for resources and~~ the compute environment to process workload submitted within the reservation using a modified compute environment relative to a configuration of the compute environment when the request for the reservation was received.

2. (Original) The method of claim 1, wherein the compute environment is one of a compute farm, a cluster environment and a grid environment.

3. (Original) The method of claim 1, wherein the request for resources is a request for consumption resources.

4. (Original) The method of claim 1, wherein the request for resources is a request for provisioning services.

5. (Original) The method of claim 1, wherein the request for resources is a request to process a batch job.

6. (Original) The method of claim 1, wherein the request for resources is a request for direct volume access.

7. (Original) The method of claim 1, wherein the request for resources is a request for a virtual private cluster.
8. (Previously Presented) The method of claim 1, wherein monitoring events after receiving the request for resources further comprises monitoring the compute environment, via the common administrative control.
9. (Previously Presented) The method of claim 1, wherein monitoring events after receiving the request for resources further comprises monitoring to determine if a party submitting the request has submitted workload for processing once resources in the compute environment are reserved for the workload .
10. (Previously Presented) The method of claim 9, wherein if the party submitting the request for resources has not submitted workload for processing after a predetermined amount of time, then dynamically modifying the request for resources further comprises canceling the request for resources.
11. (Previously Presented) The method of claim 10, wherein workload comprises one of a reservation, an object that monitors policy, an object that monitors credentials, an object that monitors node states via the common administrative control and an object that monitors the compute environment via the common administrative control.
12. (Original) The method of claim 11, wherein based on the monitored events in the compute environment, modifying the compute environment further comprises dynamically modifying the compute environment to satisfy the request for resources.
13. (Original) The method of claim 12, wherein dynamically modifying the compute environment further comprises at least one of: modifying at least one node, modifying at least one operating system, installing end user applications, dynamically partitioning node resources and adjusting network configuration.

14. (Cancelled)

15. (Currently Amended) The method of claim [[14]] 1, wherein monitoring events after receiving the request for a reservation further comprises monitoring compute resources associated with the reservation.

16. - 23. (Cancelled)

24. (Previously Presented) The method of claim 1, wherein monitoring events after receiving the request for resources further comprises monitoring workload submitted within a reservation based on the request.

25. (Previously Presented) The method of claim 24, wherein if the job submitted within the reservation will extend beyond the reservation, the method further comprises canceling the workload.

26. (Currently Amended) The method of claim 25, wherein prior to canceling the workload, the method further comprises presenting to the entity that submitted the workload an option of extending the reservation to accommodate the workload .

27. (Previously Presented) The method of claim 26, wherein the option of extending the reservation to accommodate the workload is subject to pre-established policies.

28. (Original) The method of claim 27, further comprising presenting to the entity, with the option of extending the reservation, a pricing option to extend the reservation.

29. (Previously Presented) The method of claim 1, wherein the request for resources in a compute environment comprises a reservation of resources for a window of time in which at least one user submits personal reservations.

30. (Original) The method of claim 29, wherein personal reservations are one of a non-administrator reservation and an administrator reservation.

31. (Original) The method of claim 29, wherein the reservation of compute resources for a window of time is a request for cluster resources for a periodic window of time.

32. (Previously Presented) The method of claim 31, wherein the periodic window of time is daily, weekly, monthly, quarterly or yearly.

33. (Previously Presented) The method of claim 29, further comprising:

receiving a personal reservation for the use of compute resources within the window of time; and

providing access to the reserved compute resources for the personal reservation to process workload .

34. (Original) The method of claim 33, wherein if a received consumption job associated with the personal reservation will exceed the window of time for the reservation of compute resources, then the method comprises canceling and locking out the personal reservation from access to the compute resources.

35. (Original) The method of claim 33, wherein if a received consumption job associated with the personal reservation will exceed the window of time, then the method comprises never starting the consumption job.

36. (Previously Presented) The method of claim 34, further comprising, before canceling and locking out the personal reservation, the step of:

presenting to a user who submitted the personal reservation an option of allowing the workload running within the personal reservation to complete although a time for completing the remaining workload is beyond the window of time for the user's reservation of compute resources.

37. (Previously Presented) The method of claim 34, further comprising, if the workload submitted under a personal reservation would exceed the personal reservation, extending the personal reservation to meet the needs of the workload.

38. - 43. (Cancelled)

44. (Currently Amended) A computer-readable storage medium storing instructions for controlling a computing device to dynamically manage resources within a compute environment comprising a plurality of compute nodes under common administrative control, the instructions comprising:

receiving a request for a reservation, at a current time, for resources in the compute environment at a future time;

monitoring events after receiving the request for a reservation for resources; and

based on the monitored events, dynamically modifying ~~at least one of the request for resources and~~ the compute environment to process workload submitted within the reservation using a modified compute environment relative to a configuration of the compute environment when the request for the reservation was received.

45. (Currently Amended) A system for dynamically managing resources within a compute environment comprising a plurality of compute nodes under common administrative control, the system comprising:

hardware means for receiving a request for a reservation, at a current time, for resources in the compute environment at a future time;

hardware means for monitoring events after receiving the request the reservation for resources; and

hardware based on the monitored events, means for dynamically modifying ~~at least one of the request for resources and~~ the compute environment to process workload submitted within

the reservation using a modified compute environment relative to a configuration of the compute environment when the request for the reservation was received.

46. (Currently Amended) A system for dynamically managing resources within a compute environment comprising a plurality of compute nodes under common administrative control, the system comprising:

a processor;

a hardware module configured to control the processor to receive a request for a reservation, at a current time, for resources in the compute environment at a future time;

a hardware module configured to control the processor to monitor events after receiving the request for resources; and

a hardware module configured to control the processor, based on the monitored events, to dynamically modify at least one of the request for resources and the compute environment to process workload submitted within the reservation using a modified compute environment relative to a configuration of the compute environment when the request for the reservation was received based on the monitored events.

47. (Currently Amended) A compute environment comprising a plurality of computing devices under common administrative control, the compute environment having resources which are dynamically managed according to a method comprising:

receiving a request for resources in the compute environment at a future time;

monitoring events after receiving the request for resources; and

based on the monitored events, dynamically modifying ~~at least one of the request for resources and the compute environment~~ to process workload submitted within the reservation using a modified compute environment relative to a configuration of the compute environment when the request for the reservation was received.